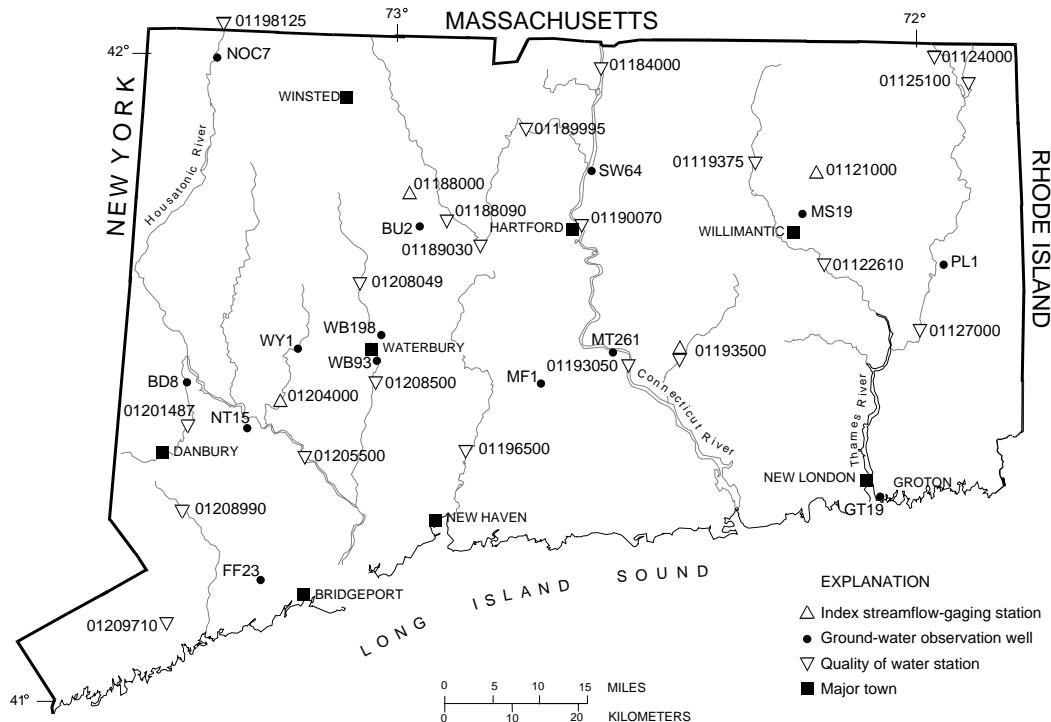


# U.S. Department of the Interior U.S. Geological Survey



## WATER-RESOURCES CONDITIONS IN CONNECTICUT, APRIL 2003

The USGS provides maps, reports, and information to help others manage, develop, and protect America's water, energy, mineral, land, and biological resources.



### DATA-COLLECTION SITES USED IN THIS REPORT

This report contains a small part of the ground-water, surface-water, and water-quality data collected by the USGS at sites in Connecticut. More complete information may be found in the annual Water-Data Report. Data for this report were collected by the USGS in cooperation with the Connecticut Dept. of Environmental Protection.

For more information on USGS programs in Connecticut, please contact Virginia de Lima (District Chief); 101 Pitkin St., East Hartford, CT 06108; phone (860) 291-6740; fax (860) 291-6799; dc\_ct@usgs.gov

Additional earth science information, including this document, is on the USGS Home Page on the World Wide Web at <http://www.usgs.gov> or the Connecticut District home page at <http://ct.water.usgs.gov>. For more information on all USGS reports and products (including maps, images, and computerized data), call 1-888-ASK-USGS.

#### INDEX TO INFORMATION

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Streamflow	2	Ground Water	4

**STREAMFLOW** (measured in cubic feet per second) → PROVISIONAL DATA ←

Streamflow across the State was in the normal range. Flow at Burlington Brook (NW Connecticut), and Salmon River (SE Connecticut) remained in the normal range for the second consecutive month. Flows at Mount Hope River (NE Connecticut), and Pomperaug River (SW Connecticut) remained in the normal range for the sixth consecutive month. Across the State, mean streamflow for April averaged 84.5 percent of the April long-term median values.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	APRIL 2003 MEAN	MARCH 2003 MEAN	APRIL 2002 MEAN	APRIL MAXIMUM VALUE (year recorded)	APRIL MINIMUM VALUE (year recorded)	APRIL MEDIAN (1971-2000)
MT HOPE RIVER (01121000)	79.1	133	49.2	197	1983	85.8
BURLINGTON (01188000)	11.7	16.5	7.06	38.8	1983	13.9
SALMON RIVER (01193500)	352	423	145	803	1983	312
POMPERAUG (01204000)	179	264	112	693	1987	211

**MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS**

Shaded areas on graphs show highest and lowest monthly mean discharge of record.

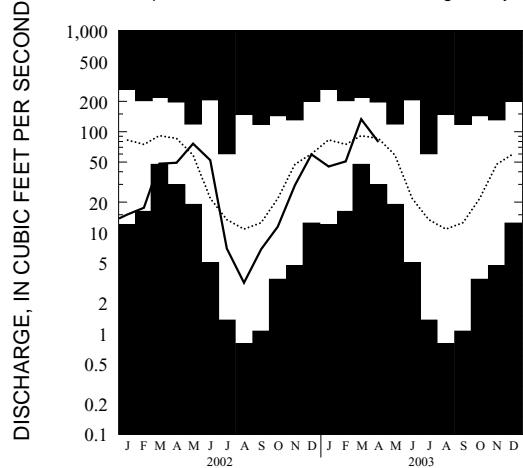


Current record ..... Median (1971-2000)

**MOUNT HOPE RIVER NEAR WARRENVILLE**

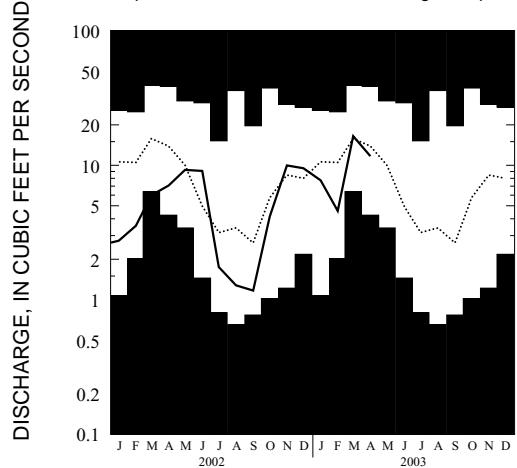
28.6 sq. mi.

Record began July 1940

**BURLINGTON BROOK NEAR BURLINGTON**

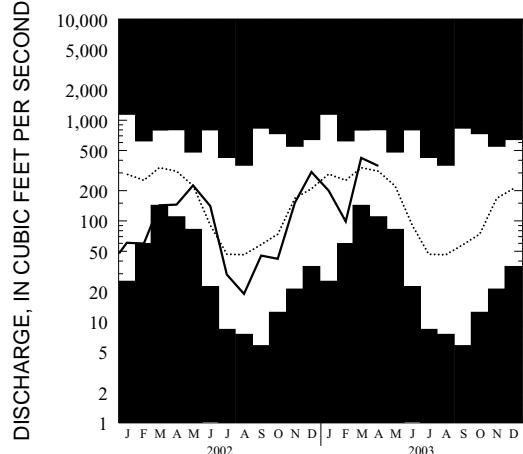
4.10 sq. mi.

Record began Sept. 1931

**SALMON RIVER NEAR EAST HAMPTON**

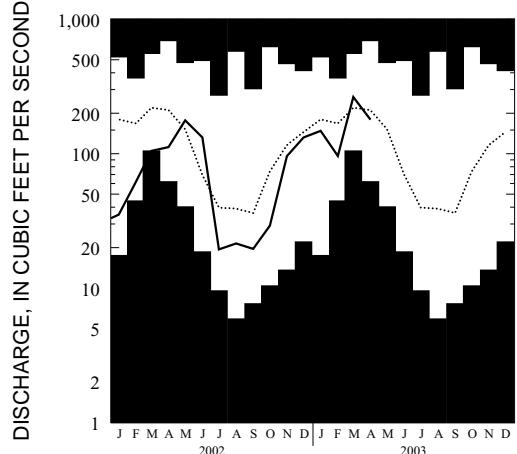
100 sq. mi.

Record began July 1928

**POMPERAUG RIVER AT SOUTHBURY**

75.1 sq. mi.

Record began June 1932



# CHEMICAL, PHYSICAL, AND BACTERIOLOGICAL QUALITY OF SELECTED STREAMS IN CONNECTICUT

→ PROVISIONAL DATA ←

[Station locations shown on front page; --, not applicable; —, not available; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using membrane filter method with immediate incubation; col/100 mL, colonies per 100 milliliters; K, results based on colony count outside the acceptable range (non-ideal colony count)]

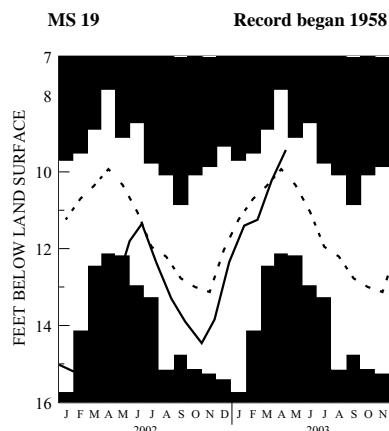
USGS WATER-QUALITY STATION NAME AND NUMBER	SAMPLE DATE IN 2003	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in $\mu\text{S}/\text{cm}$ at $25^\circ\text{C}$ )	WATER STEMPERATURE ( $^\circ\text{C}$ )	DISSOLVED OXYGEN CONCENTRATION (mg/L)/PERCENT SATURATION	FIELD PH	FECAL COLIFORM (COL/100 mL)	E. COLI (COL/100 mL)
01119375 Willimantic R. at Merrow					SITE NOT SAMPLED THIS MONTH			
01122610 Shetucket R. at South Windham	4/09	1210 / --	111	3.5	13.4 / 101	7.0	93 K	85 K
01124000 Quinebaug R. at Quinebaug					SITE NOT SAMPLED THIS MONTH			
01125100 French R. at North Grosvenordale					SITE NOT SAMPLED THIS MONTH			
01127000 Quinebaug R. at Jewett City					SITE NOT SAMPLED THIS MONTH			
01184000 Connecticut R. at Thompsonville	4/22	25,500 / 23	105	10.0	10.9 / 97	7.1	74 K	59
01188090 Farmington R. at Unionville	4/01	1630 / 7	87	4.0	14.0 / 107	6.3	5 K	2 K
01189030 Pequabuck R. at Farmington	4/02	181 / --	214	6.0	11.1 / 89	7.0	105 K	22
01189995 Farmington R. at Tariffville	4/02	2200 / 12	116	5.5	12.8 / 101	6.5	37	15 K
01190070 Connecticut R. at Hartford	4/07	-- / --	121	3.0	13.7 / 98	7.2	60	33
01193050 Connecticut R. at Middle Haddam					THIS SITE IS DISCONTINUED AS OF APRIL 2003			
01193500 Salmon R. near East Hampton	4/09	304 / 18	112	3.5	13.5 / 101	6.8	23	7 K
01196500 Quinnipiac R. at Wallingford	4/10	327 / 18	405	6.0	13.7 / 109	7.5	420	124
01198125 Housatonic R. near Ashley Falls, MA					SITE NOT SAMPLED THIS MONTH			
01201487 Still R. at Rt. 7 at Brookfield Center					SITE NOT SAMPLED THIS MONTH			
01205500 Housatonic R. at Stevenson					SITE NOT SAMPLED THIS MONTH			
01208049 Naugatuck R. near Waterville					SITE NOT SAMPLED THIS MONTH			
01208500 Naugatuck R. at Beacon Falls					SITE NOT SAMPLED THIS MONTH			
01208990 Saugatuck R. near Redding	4/14	79.3 / 13	204	10.0	12.4 / 108	7.2	11 K	4 K
01209710 Norwalk R. near Winnipauk	4/14	132 / --	294	8.0	12.5 / 103	7.5	27	9 K

## GROUND-WATER LEVELS

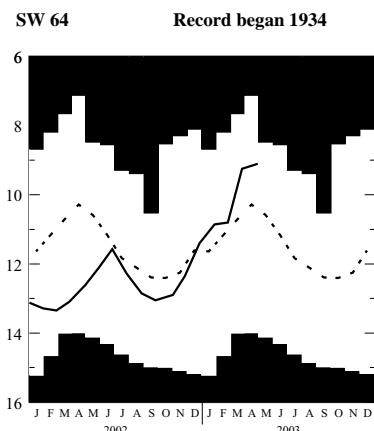
(Status of ground-water storage as indicated by water level changes in observation wells,  
as shown on hydrographs)

- Shaded area on graphs show highest and lowest water levels of record through calendar year 2002.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 2000.

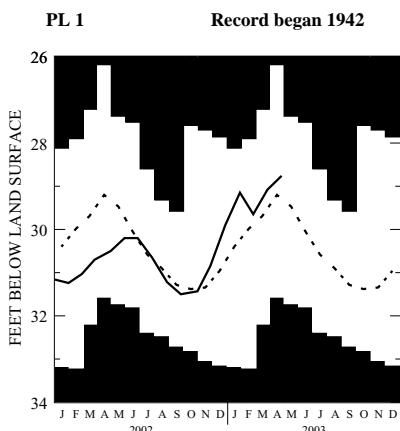
### MANSFIELD



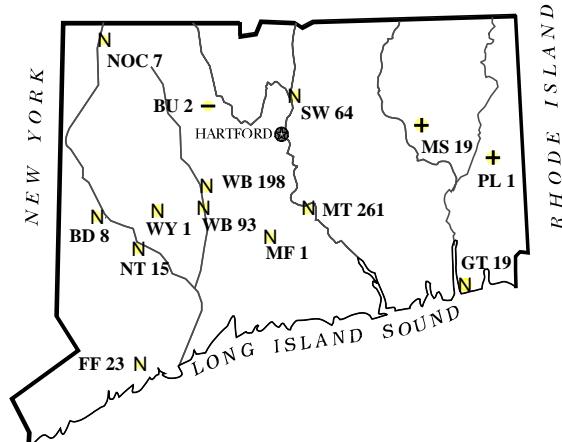
### SOUTH WINDSOR



### PLAINFIELD



### MASSACHUSETTS



### ABOVE NORMAL

Within the highest 25%  
of record for this month.



### NORMAL RANGE

Between the highest and lowest 25%  
of record for this month.

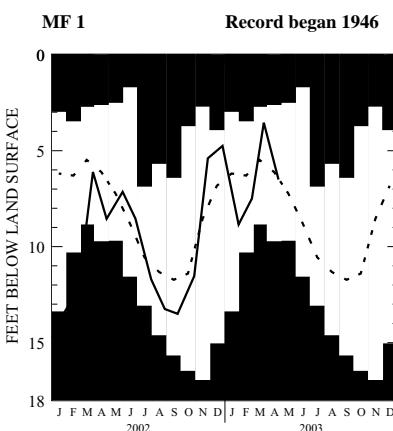


### BELOW NORMAL

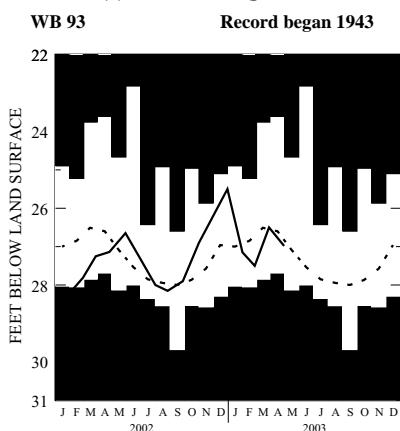
Within the lowest 25%  
of record for this month.



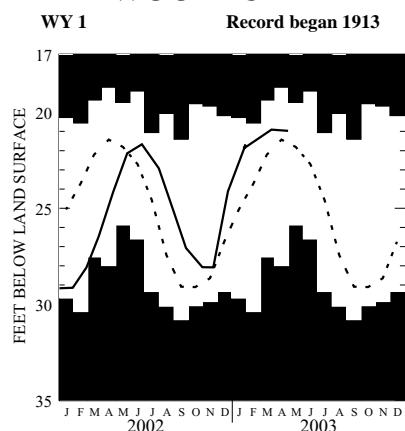
### MIDDLEFIELD



### WATERBURY



### WOODBURY



**GROUND-WATER LEVELS**

One record high was recorded during April 2003. Four new wells were added to the network—GW 21, GW 22, GW 23 (Greenwich), and MS 80 (Mansfield).

Ground-water levels are in feet below land surface. Maximum and minimum values are from end-of-the month readings and may not be the highest or lowest recorded during the month. Statistics are based on period of record (through calendar year 2000). Ground-water level data are collected by USGS personnel and individual observers. Because of last year's drought, measurements were made in selected wells on a weekly or twice-a-month basis. In some wells, this causes the column labeled APR MIN to have a value that is not the same as the one reported in the column labeled APRIL 2002, which is the last measurement for the month.

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE							NEW RECORD	YEAR RECORD BEGAN
	APRIL 2003 (DATE)	MARCH 2003	APRIL 2002	APRIL MAX (YR RECORDED)	APRIL MIN (YR RECORDED)	APR. MEDIAN			
BD 8 (Brookfield)	29.08	29	29.25	32.37	26.33	1983	32.37	2002	28.69
BU 2 (Burlington)	18.11	29	20.59	29.44	13.73	1983	29.44	2002	16.70
BU 143 (Burlington)	3.72	29	3.16	6.73	3.69	2001	6.73	2002	3.71
BU 144 (Burlington)	2.36	29	2.22	2.61	2.31	2001	2.65	1999	2.49
CL 223 (Clinton)	3.13	24	2.49	4.24	2.64	2000	4.24	2002	3.48
CL 224 (Clinton)	18.45	24	18.83	21.04	17.87	1994	21.04	2002	18.66
CL 225 (Clinton)	5.64	24	5.55	5.93	5.05	1996	6.05	1999	5.51
CO 335 (Colchester)	6.72	25	5.30	7.57	5.85	1993	7.57	2002	6.75
CV 51 (Coventry)	3.78	25	3.45	4.42	3.57	2000	4.45	1999	3.98
D 116 (Durham)	0.27	24	0.11	0.48	0.17	2000	1.34	1988	0.42
D 117 (Durham)	9.87	24	9.07	10.67	6.59	1996	11.44	1988	9.68
D 119 (Durham)	0.29	24	0.00	0.77	0.09	2000	1.79	1988	0.43
D 120 (Durham)	1.85	24	1.33	2.18	1.34	2000	2.87	1988	2.08
EL 82 (Ellington)	5.56	28	5.08	6.05	5.17	2000	6.05	2002	5.57
EL 139 (Ellington)	20.51	28	16.74	24.03	17.74	2000	24.03	2002	20.19
EL 140 (Ellington)	12.45	28	10.75	14.65	11.05	2000	14.65	2002	12.17
EW 133 (East Windsor)	4.55	28	3.86	5.00	4.03	1987	5.11	1995	4.80
EW 134 (East Windsor)	50.24	28	50.60	52.20	49.08	1990	52.20	2002	49.81
FF 23 (Fairfield)	7.62	30	7.35	8.25	5.32	1983	8.81	1998	7.66
FF 30 (Fairfield)	1.73	30	1.71	4.87	1.03	2000	4.87	2002	1.60
FF 31 (Fairfield)	5.70	30	5.07	7.17	4.18	1996	7.17	2002	5.12
FF 32 (Fairfield)	5.41	30	5.06	6.31	4.70	1994	6.31	2002	5.40
FF 33 (Fairfield)	4.47	30	4.32	5.18	4.30	2000	5.18	2002	4.66
GR 328 (Granby)	8.95	28	5.80	13.21	4.81	1983	13.21	2002	8.75
GR 329 (Granby)	3.98	28	2.06	6.15	1.48	1983	7.63	1985	4.24
GR 330 (Granby)	2.37	28	1.82	2.72	1.60	1983	3.70	1985	3.04
GR 331 (Granby)	8.66	28	6.10	9.41	4.41	1983	10.12	1995	8.57
GT 19 (Groton)	13.50	27	14.52	15.62	9.47	1983	15.90	1963	13.82
GW 21 (Greenwich)	19.52	30	17.89	NA	NA	NA	NA	NA	2003
GW-22 (Greenwich)	4.98	30	4.16	NA	NA	NA	NA	NA	2003
GW-23 (Greenwich)	24.10	30	18.87	NA	NA	NA	NA	NA	2003
HM 445 (Hamden)	18.68	30	17.11	20.65	16.06	1996	22.25	1999	18.06
HM 446 (Hamden)	2.98	30	2.75	3.70	2.51	2000	3.70	2002	2.86
HM 447 (Hamden)	2.15	30	1.85	3.15	1.63	2000	3.15	2002	2.00
HM 448 (Hamden)	12.57	30	12.25	13.66	12.00	2000	13.66	2002	12.53
HM 449 (Hamden)	14.79	30	14.80	17.38	14.08	1993	17.48	1999	14.96
HM 450 (Hamden)	11.14	30	10.80	13.20	11.14	2003	13.37	2001	12.70
								>	1993

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE								NEW RECORD	YEAR RECORD BEGAN
	APRIL 2003 (DATE)	MARCH 2003	APRIL 2002	APRIL MAX (YR RECORDED)	APRIL MIN (YR RECORDED)	APR. MEDIAN				
MB 32 (Marlborough)	2.65	25	1.20	5.12	1.73	1993	5.12	2002	2.48	1986
MB 35 (Marlborough)	6.77	25	4.49	10.42	5.41	2000	10.42	2002	7.23	1993
MB 36 (Marlborough)	3.01	25	2.11	2.80	2.58	2000	3.36	2001	2.86	1993
MF 1 (Middlefield)	6.51	24	3.55	8.55	2.59	1983	9.69	1966	6.13	1946
MS 19 (Mansfield)	9.43	25	10.22	13.05	7.85	1983	13.14	2002	10.00	1958
MS 44 (Mansfield)	2.15	25	+0.64	2.33	0.48	1987	4.45	1985	2.19	1982
MS 45 (Mansfield)	11.46	25	10.60	13.75	10.27	1996	13.75	2002	10.99	1987
MS 46 (Mansfield)	12.88	25	12.42	14.70	11.88	1993	14.70	2002	12.30	1987
MS 74 (Mansfield)	1.33	25	0.62	4.90	0.10	1993	4.90	2002	1.30	1992
MS 75 (Mansfield)	4.70	25	4.75	16.23	4.12	1993	16.23	2002	5.26	1992
MS 76 (Mansfield)	29.40	25	30.08	36.05	26.65	2000	36.05	2002	28.22	1992
MS 77 (Mansfield)	1.53	25	0.78	4.38	0.48	2000	4.38	2002	1.70	1993
MS 80 (Mansfield)	12.42	25	11.09	NA	NA	NA	NA	NA	NA	2003
MT 261 (Middletown)	18.93	24	19.43	19.84	17.16	1983	21.50	1975	19.16	1956
NHV 201 (North Haven)	14.86	30	15.03	17.18	11.69	1983	17.32	1985	14.81	1975
NOC 7 (North Canaan)	9.42	30	9.02	9.43	7.37	1986	9.74	1968	9.24	1958
NSN 77 (N. Stonington)	8.43	24	7.58	10.40	7.66	2000	11.56	1992	9.64	1991
NSN 78 (N. Stonington)	3.96	24	3.71	4.14	1.93	1994	4.47	2001	3.77	1991
NT 15 (Newtown)	3.71	29	3.52	6.17	0.70	1983	6.92	1985	3.08	1966
PL 1 (Plainfield)	28.76	25	29.08	30.50	26.19	1983	31.57	1966	29.19	1942
SB 30 (Southbury)	17.62	29	18.15	19.50	15.86	1996	19.50	2002	17.18	1979
SB 39 (Southbury)	6.40	29	4.94	7.01	4.72	1993	7.81	1995	5.99	1991
SB 41 (Southbury)	46.62	29	46.26	47.59	45.30	1997	48.16	1999	46.44	1991
SB 42 (Southbury)	13.31	29	12.50	14.91	11.88	1987	14.96	2002	12.33	1993
SC 19 (Scotland)	3.25	25	1.75	3.36	1.93	2000	4.60	1999	3.13	1983
SC 20 (Scotland)	2.51	25	0.03	5.80	0.16	2000	5.80	2002	3.23	1983
SC 21 (Scotland)	+0.26	25	+0.29	0.40	+0.69	1996	0.53	1985	+0.22	1983
SC 22 (Scotland)	10.29	25	9.30	12.01	8.32	2000	12.01	2002	10.29	1984
SC 23 (Scotland)	1.84	25	1.44	1.50	1.44	1996	2.26	1985	1.84	1983
SM 7 (Salem)	7.87	24	7.63	9.48	4.88	1983	10.63	1985	8.21	1979
SW 64 (S. Windsor)	9.10	28	9.25	12.61	7.12	1983	13.99	1966	10.12	1934
SY 15 (Salisbury)	11.62	29	12.22	17.36	9.76	1993	17.36	2002	12.33	1966
SY 23 (Salisbury)	6.60	29	4.27	7.17	4.40	1996	7.17	2002	5.54	1987
SY 24 (Salisbury)	9.62	29	6.78	12.24	5.68	1994	12.24	2002	9.41	1986
WB 93 (Waterbury)	26.98	29	26.50	27.14	23.61	1983	27.69	1985	26.60	1943
WB 198 (Waterbury)	12.75	29	13.45	18.78	5.79	1983	18.78	2002	11.89	1943
WY 1 (Woodbury)	20.97	29	20.91	24.17	18.70	1983	26.90	1915	21.60	1913

New records: >, new record high for month; >>, new record high for period of record; <, new record low for month;  
 <<, new record low for period of record; \*, median not calculated--number shown is mean; NA, not available; OBS, obstructed;  
 +, water level above ground surface; --, not measured.